ABSTRACT

A variable attenuation device includes a resistive array having two or more input nodes, two or more output nodes, and two or more resistive devices for coupling the input nodes and the output nodes. A first switch has an input terminal and two or more selectable output terminals, such that the input terminal is configured to receive an input signal and the two or more selectable output terminals are coupled to the two or more input nodes of the resistive array. A second switch has two or more selectable input terminals and an output terminal, such that the output terminal is configured to provide an attenuated output signal and the two or more selectable input terminals are coupled to the two or more output nodes of the resistive array. The output terminal selected on the first switch and the input terminal selected on the second switch varies the resistance seen by the input signal, and the values of the two or more resistive devices are configured to allow for substantially-uniform attenuation steps of the input signal.